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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,886	04/05/2001	Rinko Katsuda	AA352F	7733

27752 7590 10/16/2006

THE PROCTER & GAMBLE COMPANY  
INTELLECTUAL PROPERTY DIVISION  
WINTON HILL BUSINESS CENTER - BOX 161  
6110 CENTER HILL AVENUE  
CINCINNATI, OH 45224

EXAMINER
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DOUYON, LORNA M

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/806,886

Applicant(s)

KATSUDA ET AL.

Examiner

Lorna M. Douyon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1, 7, 9-11, 13-18 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 7, 9-11, 13-18, 20-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

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1. This action is responsive to the amendment filed on July 31, 2006.
2. Claims 1, 7, 9-11, 13-18, 20-24 are pending.
3. The objection to claims 13 and 14 for minor informalities is withdrawn in view of Applicants' amendment.
4. The rejection of claim 18 under 35 U.S.C. 112, first paragraph is withdrawn in view of Applicants' amendment.
5. The rejection of claims 19, 20, 21 and 22 under 35 U.S.C. 112, second paragraph is withdrawn in view of Applicants' amendment.
6. The rejection of claims 1, 7, 9-11, 13-18, 20-23 under 35 U.S.C. 103(a) as being unpatentable over Baginski et al. (US Patent No. 4,652,392) in view of Inamorato (US Patent No. 4,252,664) is withdrawn in view of Applicants' amendment.
7. Claims 1, 7, 9-11, 13-18, 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baginski et al. (US Patent No. 4,652,392), hereinafter "Baginski" in view of Inamorato (US Patent No. 4,252,664) in further view of France et al. (US Patent No. 5,691,294), hereinafter "France".

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Baginski teaches a granular detergent compositions having a controlled suds pattern comprising (a) suds suppressing amount of a stable suds controlling component comprising a silicone suds controlling agent releasably incorporated in a water-soluble or water-dispersible, substantially non-surface active, detergent-impermeable and non-hygroscopic carrier, said component being substantially free of hygroscopic water-soluble inorganic salts and in the form of irregularly shaped particles having a minimum dimension not less than about 0.05 cm and a maximum dimension being at least about 20% greater than the minimum dimension (equivalent to the delayed-release foam suppressing component of the present claims); and (b) a sudsing detergent component like anionic detergents (see col. 1, lines 43-60). The silicone "droplets" in the carrier matrix should be from about 1 to about 50 microns, preferably from about 5 to about 40 microns, more preferably from about 5 to about 30 microns in diameter for maximum effectiveness (see col. 3, lines 22-26). A very preferred carrier material is a mixture of from about 0.2% to about 15% of fatty acids containing from about 12 to about 30 carbon atoms and balance polyethylene glycol (PEG) (see col. 6, lines 4-10; col. 5, line 54-55). The irregularly shaped particulate silicone suds controlling component can be conveniently prepared in a highly preferred flake form having a thickness of about 0.04 to about 0.15 cm wherein in such flake form, the silicone does not substantially come into contact with the detergent surfactant ingredient when admixed with or incorporated into a detergent composition (see col. 6, lines 16-36). Generally, above about a 2:1, preferably from about 5:1 to about 100:1 weight ratio of carrier to silicone suds controlling agent is employed (see col. 6, lines 53-56). The amount of silicone suds controlling agent in the detergent composition is from about 0.0005% to about 10% by weight (see col. 7, lines 21-25). The detergent composition can contain, in addition to the

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silicone and detergent, water-soluble builders (see col. 10, lines 9-14). The detergent like anionic detergents include sodium and potassium alkyl sulfates and sodium alkyl glyceryl ether sulfonates (see col. 7, line 35 to col. 8, line 24). The detergent composition can contain all manner of additional materials commonly found in laundering and cleaning compositions, for example, soil suspending agents, enzymes, optical bleaches, fillers, fabric softeners and bleaching agents (see col. 11, lines 16-35). Baginski, however, fails to disclose the incorporation of a foaming component comprising an effervescent granule, the particle size of the gas bubbles as those recited, and wherein the delayed-release foam suppressing component reduces the gas bubbles at least about 40% to about 70% after about 6 to 10 minutes, and wherein the at least one surface active agent in the foaming component comprises an alkyl N-methyl glucamide.

Inamorato teaches granular detergent compositions suitable for use in clothes-washing machines (see col. 1, lines 10-13) comprising (1) primary granules of one composition (e.g. spray-dried built detergent) and (2) effervescent granules containing a binder, an acid, a carbonate reactive with the acid (see abstract) (which is equivalent to the foaming component of the present claims), wherein the size of the effervescent granules are in the range of about 0.2 to 3 mm (see col. 4, lines 42-43). The carbonate is preferably sodium carbonate and the suitable acids include organic acids such as citric acid (see col. 1, lines 57-65). Among the materials which may be used as binders are higher fatty acids (of, e.g. 16-22 carbon atoms), polyalkylene glycols (e.g. polyethylene glycols), non-ionic detergents (e.g. polyethoxylation products made by reacting ethylene oxide with fatty alcohol, fatty acid, fatty amine, alkyl phenol or fatty amide, amides), see col. 1, lines 28-39. The proportion of acid in the mixture is preferably at least 5%, e.g. about 10, 15, 20, 30 or 40% and the carbonate is preferably at least 5%, e.g. about 10, 15, 20,

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30, 40, 50 or 60% (see col. 1, lines 65-68). The granular detergent composition comprises 5-10 parts of effervescent granules and 9-95 parts of non-effervescing granules or spray-dried built detergent containing nonionic surfactants (see claim 1). The moisture content of the spray-dried particles is generally in the range of about 3 to 13% (see col. 4, lines 61-65). The "about 3%" read on the "less than about 1.5%" of claim 24, because the term "about" permits some tolerance, see *In re Ayers*, 69 USPQ 109, and *In re Erickson*, 145 USPQ 207). One convenient process for making the effervescent granules is to dry-blend the ingredients in finely divided form, then heat the blend to fuse the binder (see col. 4, lines 1-6). The size of the effervescent granules may be varied, e.g. in the range of about 0.2 to 3 mm (see col. 4, lines 42-50). Typical granular spray-dried detergent compositions with which the effervescent granules may be blended generally contain organic surface-active detergents (see col. 4, lines 51-54), such as nonionic surfactants like condensation products of higher fatty alcohols with ethylene oxide (see col. 6, lines 32-39), for example 11 mols of oxyethylene per mol of alkanol (see col. 8, lines 65-68). Often one or more gas bubbles become visible at the surface of a particle in water and some or all of the particles, originally more dense than water, begin to rise in the water after a short time (see col. 4, lines 34-38).

France teaches the equivalency of ethoxylated alcohols having an alkyl group consisting of 9 to 15 carbon atoms and an average of from 2 to 10 ethoxylated groups per molecule with N-methyl glucamides having an alkyl group consisting of 12 to 18 carbon groups (see claim 4) as nonionic surfactants. See also col. 2, line 36 to col. 3, line 41.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the granular detergent composition comprising nonionic surfactant and

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effervescent granules of Inamorato into the granular detergent composition of Baginski because Baginski specifically desires additional materials commonly found in laundering and cleaning compositions and Inamorato teaches such materials suitable for washing fabrics, and to reasonably expect the particle size of the gas bubbles to be 400, 200 or 100 microns or less because Inamorato teaches that one or more gas bubbles become visible at the surface of a particle in the water and thus, the visible bubbles would overlap the particle size as those recited. With respect to the silicone suds controlling agent or delayed-release foam suppressing component reducing the gas bubbles at least about 40% to about 70% after about 6 to 10 minutes, it would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the silicone suds controlling agent of Baginski to exhibit a similar characteristic because similar components in the silicone suds controlling agent have been utilized.

It would have also been obvious to one of ordinary skill in the art at the time the invention was made to substitute the nonionic surfactants like condensation products of higher fatty alcohols with ethylene oxide of Baginski and Inamorato with N-methyl glucamides having an alkyl group consisting of 12 to 18 carbon groups because the substitution of art recognized equivalents as shown by France is within the level of ordinary skill in the art.

### ***Response to Arguments***

8. Applicants' arguments filed July 31, 2006 have been fully considered but they are not persuasive.

With respect to the rejection based upon Baginski in view of Inamorato, in further view of France, Applicants argue that Baginski fails to suggest including an effervescent granule (sudsing component), and although Baginski describes that additional laundry components can be included, the intent of the disclosure of Baginski is the controlled foaming of the detergent. Applicants also argue that Inamorato fails to suggest adding the disclosed effervescent granules to a detergent composition containing a sudsing control agent, such as a silicone material and fails to teach a foaming component (effervescent granule) at least one surface active including an alkyl N-methyl glucamide. Applicants further argue that France fails to associate the combination of the non-ionic with a foaming component (e.g., there is no disclosure of using the N-methyl glucamide in combination with an effervescent granule.

The Examiner respectfully disagrees with the above argument because, as stated in the previous office action, Baginski, in col. 1, lines 43-60, not only teaches a stable suds controlling component but also a sudsing detergent component. In col. 11, lines 16-18, Baginski also teaches that the detergent compositions (which contains the suds controlling components and the sudsing detergent component) can contain all manner of additional materials commonly found in laundering and cleaning compositions. Inamorato, the secondary reference, teaches a granular detergent composition comprising primary granules (e.g. spray-dried built detergent) and effervescent granules containing a binder, acid and carbonate (see abstract), and which is sudsing. Even though Baginski nor Inamorato does not explicitly disclose alkyl N-methyl glucamide, France, in an analogous art, teaches the equivalency of ethoxylated alcohols having an alkyl group consisting of 9 to 15 carbon atoms and an average of from 2 to 10 ethoxylated groups per molecule with N-methyl glucamides having an alkyl group consisting of 12 to 18



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carbon groups (see claim 4) as nonionic surfactants. Hence, the substitution of art recognized equivalents as shown by France is within the level of ordinary skill in the art. Inasmuch as Baginski specifically desires additional materials commonly found in laundering and cleaning composition, and also teaches the presence of sudsing component, and because Inamorato teaches a sudsing component and which materials are commonly found in laundering and cleaning composition, and France teaches the equivalency of alkyl N-methyl glucamides with ethoxylated fatty alcohols, the combination of Baginski, Inamorato and France is proper and is maintained.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

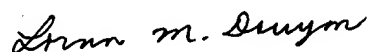
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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is (571) 272-1313.

The examiner can normally be reached on Mondays-Fridays from 8:00AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Lorna M. Douyon  
Primary Examiner  
Art Unit 1751